



NOV 13 10 22 AM '97

November 11, 1997

Mr. John Schmeltzer
Vermont ANR/DEC
Waste Management Division
103 South Main St. /West Building
Waterbury, VT 05671-0404

RE: Supply Well Sampling at Tracy's Midway Station, Sharon, Vermont
(VT DEC Site #97-2164)

Dear Mr. Schmeltzer:

Enclosed please find the letter report for the recent water supply well sampling conducted at Tracy's Midway Station.

I am recommending that Tracy's Midway Station be removed from the VTDEC Active Hazardous Waste Sites List.

Please contact me if you have any questions or comments.

Sincerely,

Christine Ward
Hydrogeologist

Enclosure

c.: Mr. James Fisk, w/o enc.
GI#69741031

**INITIAL INVESTIGATION OF
SUSPECTED SUBSURFACE PETROLEUM
CONTAMINATION REPORT**

**TRACY'S MIDWAY STATION
ROUTE 14
SHARON, VERMONT**

(VT DEC SITE #97-2164)
GI #69741031

September 1997

Prepared for

Mr. James Fisk
RR 1, Box 2
Sharon, VT 05065

Prepared by



P.O. Box 943
Williston, Vermont 05495
(802) 865-4288

SEP 8 10 16 AM '97

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I. INTRODUCTION

This report summarizes the initial investigation of subsurface petroleum contamination at Tracy's Midway Station (Tracy's) on Route 14 in Sharon, Vermont. This work was requested by Mr. Chuck Schwer of the Vermont Department of Environmental Conservation (VTDEC) in a letter to Mr. James Fisk of Tracy's Midway Station dated May 14, 1997. This work was performed largely in accordance with the June 6, 1997, *Preliminary Work Plan and Cost Estimate for Subsurface Investigation of Suspected Petroleum Contamination* for the site prepared by Griffin. Modifications to the work plan, based on conditions encountered in the field, were approved of by Mr. Chuck Schwer (VTDEC) in a telephone conversation with Mr. Peter Schuyler (Griffin) on July 14, 1997.

II. SITE BACKGROUND

A. Site History

On May 26, 1992, one 6,000 gallon and one 4,000 gallon gasoline underground storage tanks (USTs) were closed. The USTs were located on the west side of the Tracy's building. The USTs were replaced with a single 12,000 gallon double wall compartmentalized UST, also located on the west side of the building. Soil samples collected during the UST closure were screened for volatile organic compounds (VOCs) using an HNu™ systems Model PI 101 photo ionizing detector (PID). Readings of 0.2 parts per million (ppm) to 0.8 ppm were detected in soils excavated around the USTs. Readings of 40 ppm to 100 ppm were detected around the fill pipe of one of the USTs. All of the soils were backfilled around the new UST.

On May 28, 1992, two 1,000 gallon USTs were removed from the east side of Tracy's Midway Station. The USTs were in close proximity to Tracy's supply well. The USTs had been out of service for some time and were presumed to have contained gasoline. It was believed that these USTs had been abandoned when the 6,000 gallon and the 4,000 gallon UST were installed in the 1970's. No VOCs above ambient were detected in the soils surrounding the USTs.

On November 26, 1996, a four foot section of piping, used to transfer diesel fuel from the diesel tank to the dispensing island, was replaced. The diesel dispensing island is located on the western side of Tracy's. Soil samples collected during the diesel piping replacement were screened for VOCs using an HNu™ systems Model HW 101 PID. Readings of 2.4 ppm to 14.7 ppm were detected in soils excavated around the diesel dispenser island.

On April 14, 1997, the gasoline piping from the 12,000-gallon gasoline UST was extended in order to move the gasoline dispenser island approximately six feet to the northeast, out of the state highway right of way. The piping was constructed of fiberglass and was totally encased in plastic. At the time the piping was replaced, the removed piping was 5 years old, and was reported to be in good condition at the time of replacement. Soil samples collected during the gasoline piping replacement were screened for VOCs using an HNu™ systems Model PI 101 PID. Readings of up to 220 ppm were detected in soils excavated around the gasoline dispenser island.

As a result of the petroleum contamination detected in the subsurface beneath the former gasoline dispenser island, the VTDEC requested that additional work be conducted at the site in order to determine the extent and degree of petroleum contamination.

B. Site Description

Tracy's is located along Route 14 in Sharon, approximately one half mile west of the intersection with Route 132. The site is located on a topographic ridge at the junction between Fay Brook and the White River.

The area to the northeast and east of Tracy's is primarily residential. The property is bounded by Fay Brook Road on the east, and by Route 14 to the south. The White River is located down a steep bank on the south side of Route 14. To the west is a swampy area where Fay Brook flows into the White River, a cemetery is located west of the brook. Immediately north of Tracy's, down a steep bank, is Fay Brook.

The area is served by private water and sewer systems. The supply well for Tracy's is located three feet from the northeast corner of the store building. The supply well was drilled on July 10, 1968. According to the driller's log, the geology consisted of sandy loam from 0 to 22 feet and ledge from 22 feet to 440 feet. The well is cased to a depth of 90.5 feet. The static water level was recorded at 28 feet by the driller.

C. Site Geology

Soils in the vicinity of the gasoline dispenser island during the piping replacement inspection consisted of fine sand and silt with some medium gravel from grade to the extent of excavation at approximately two feet below grade. According to the Surficial Geologic Map of Vermont (Doll, 1970), the site is underlain by postglacial fluvial alluvium. Bedrock below the site is mapped as the Gile Mountain Formation consisting of gray quartz-muscovite phyllite or schist (Doll, 1961).

III. INVESTIGATIVE PROCEDURES

To further define the extent of subsurface petroleum contamination in the area of the former gasoline dispenser island, the following investigative tasks were undertaken: soil borings and soil sample collection and analyses for petroleum related constituents; supply well sample collection and analyses for petroleum related constituents; and a sensitive receptor survey.

A. Soil Borings and Soil Sampling and Analyses

Three soil borings, SB-1 through SB-3, were advanced on July 14, 1997, by T&K Drilling, under the direct supervision of a Griffin hydrogeologist. The soil borings were advanced with a truck mounted 4 1/4" hollow stem auger. The soil boring logs are presented in Appendix B. The soil boring locations are indicated on the Site Sketch (Appendix A).

Soil boring SB-1 was located approximately five feet west-southwest of the former location of the gasoline dispenser island. Soil boring SB-2 was located approximately 15 feet north of the former dispenser location, and half way between the current dispenser island location and the supply well. Soil boring SB-3 was located approximately five feet east-southeast of the former dispenser island.

Undisturbed soil samples, collected from the borings with the split spoon sampler, were logged by the supervising hydrogeologist and screened for the presence of volatile organic compounds (VOCs) using an HNu™ systems Model PI 101 photo ionizing detector (PID). Prior to screening, the PID was calibrated with isobutylene referenced to benzene. Soils were screened using the Griffin Jar/Polyethylene Bag Headspace Screening Protocol, which conforms to state and industry standards.

Soil samples from SB-1 were collected at five foot intervals to a depth of 47 feet below grade. The soils consisted primarily of sand and silt in the upper 15 feet, grading to sand and gravel from 15 to 47 feet below grade. Groundwater was encountered at a depth of 45 feet. No VOCs were detected with the PID from the soil samples from SB-1.

The work plan originally called for the installation of monitoring wells, however due to the depth of groundwater and the non-detections of VOCs in SB-1, the decision was made to complete two additional borings (SB-2 and SB-3) around the former dispenser island to a depth of 15 feet with continuous soil sampling, and to submit soil samples from each boring for laboratory analysis. This decision was approved by Mr. Chuck Schwer (VTDEC) in a telephone conversation with Mr. Peter Schuyler (Griffin) on July 14, 1997.

Soil samples from SB-2 were collected continuously from 0 to 16 feet below grade. The soils consisted primarily of sand and silt and trace gravel from 0 to 10 feet below grade, then a two foot zone of sand and gravel, and then a zone of dense fine sand and silt from 12 feet below grade to the bottom of the boring. No VOCs were detected with the PID from the soil samples collected from SB-2, except for a reading of 0.4 parts per million (ppm) in the soil sample collected from 0 to 2 feet.

Soil samples from SB-3 were collected continuously from 1 to 15 feet below grade. The soils in this boring consisted primarily of sand and silt from grade to 5 feet below grade, then sand and gravel from 5 feet below grade to the bottom of the boring. No VOCs were detected with the PID from the soil samples collected from SB-3.

The soil samples collected from the bottom of the three borings (45 to 47 feet for SB-1, 14 to 16 feet for SB-2, and 13 to 15 feet for SB-3) were submitted to Endyne, Inc. of Williston, Vermont, for analysis by EPA Method 8020 compounds by EPA Method 8260. No petroleum compounds were detected in the three soil samples. The laboratory report is included in Appendix C.

B. Supply Well Sampling and Analyses

Griffin collected a groundwater sample from Tracy's supply well on July 16, 1997. The supply well sample was collected from the outside tap on the southeast corner of Tracy's. Water was run through the tap for approximately one hour prior to collecting the sample to purge the water that had been sitting in the pipes and in the well.

The supply well sample was analyzed by Endyne, Inc. by EPA Method 602 for the presence of benzene, toluene, ethylbenzene, and xylenes (BTEX) and methyl tertiary butyl ether (MTBE). The laboratory analysis report for the supply well is included in Appendix D. Analytical results of the trip blank indicate that adequate quality assurance and control were maintained during sample collection and analysis.

A very low concentration of toluene (1.2 ppb) and a trace concentration of xylenes (TBQ < 1 ppb) were detected in the groundwater sample collected from the supply well. The detected concentrations are several orders of magnitude below the EPA Maximum Contaminant Levels (MCL) of 1,000 ppb for toluene and 10,000 ppb for xylenes, and below the Vermont Groundwater Enforcement Standard for xylenes of 400 ppb.

C. Sensitive Receptor Survey

A receptor risk assessment was conducted to identify known and potential receptors of the contamination detected at Tracy's. A visual survey was conducted at the time of the

UST piping replacement inspections, as well as during the soil borings. Based on these observations, a determination of the potential risk to identified receptors was made.

The area is serviced by private wells. The supply well for Tracy's is adjacent to the store building and approximately 20 feet from the current gasoline dispenser island. The supply well for Tracy's is potentially at risk from petroleum contamination detected in the vicinity of the former gasoline dispenser island.

The nearest surface waters are the White River, located approximately 100 feet south of the site, and Fay Brook, located approximately 100 feet northwest of the site. Both rivers are located down steep banks from the site. The water table encountered in SB-1 at a depth of 45 feet below grade is estimated to be at approximately the same elevation as the rivers. Based on the nondetection of VOCs from the soil samples collected from SB-1, SB-2 and SB-3 the potential risk to the rivers is considered minimal.

IV. CONCLUSIONS

Based on the results of this investigation, Griffin presents the following conclusions:

1. Groundwater was encountered at 45 feet below ground surface in soil boring SB-1.
2. VOCs were not detected in the soil samples collected from the three soil borings surrounding the former gasoline dispenser island.
3. Very low concentrations of toluene and xylenes were detected in the water sample collected from Tracy's supply well. The detected concentrations are several orders of magnitude below the drinking water standards and the groundwater enforcement standards for these compounds.
4. The gasoline UST system has been completely replaced within the past five years.

V. RECOMMENDATION

Griffin recommends that a confirmatory sample be collected from Tracy's supply well in September and analyzed for VOCs by EPA Method 602.

If the results of the next sampling event are the same or lower, site closure will be recommended.

REFERENCES

USGS 7.5 Minute Topographic Map, Sharon quadrangle, Vermont, dated 1981 and photoinspected 1983.

Doll, Charles G., ed., 1961, *Centennial Geologic Map of Vermont*, Vermont Geological Survey.

Doll, Charles G., ed., 1970, *Surficial Geologic Map of Vermont*, Vermont Geological Survey.

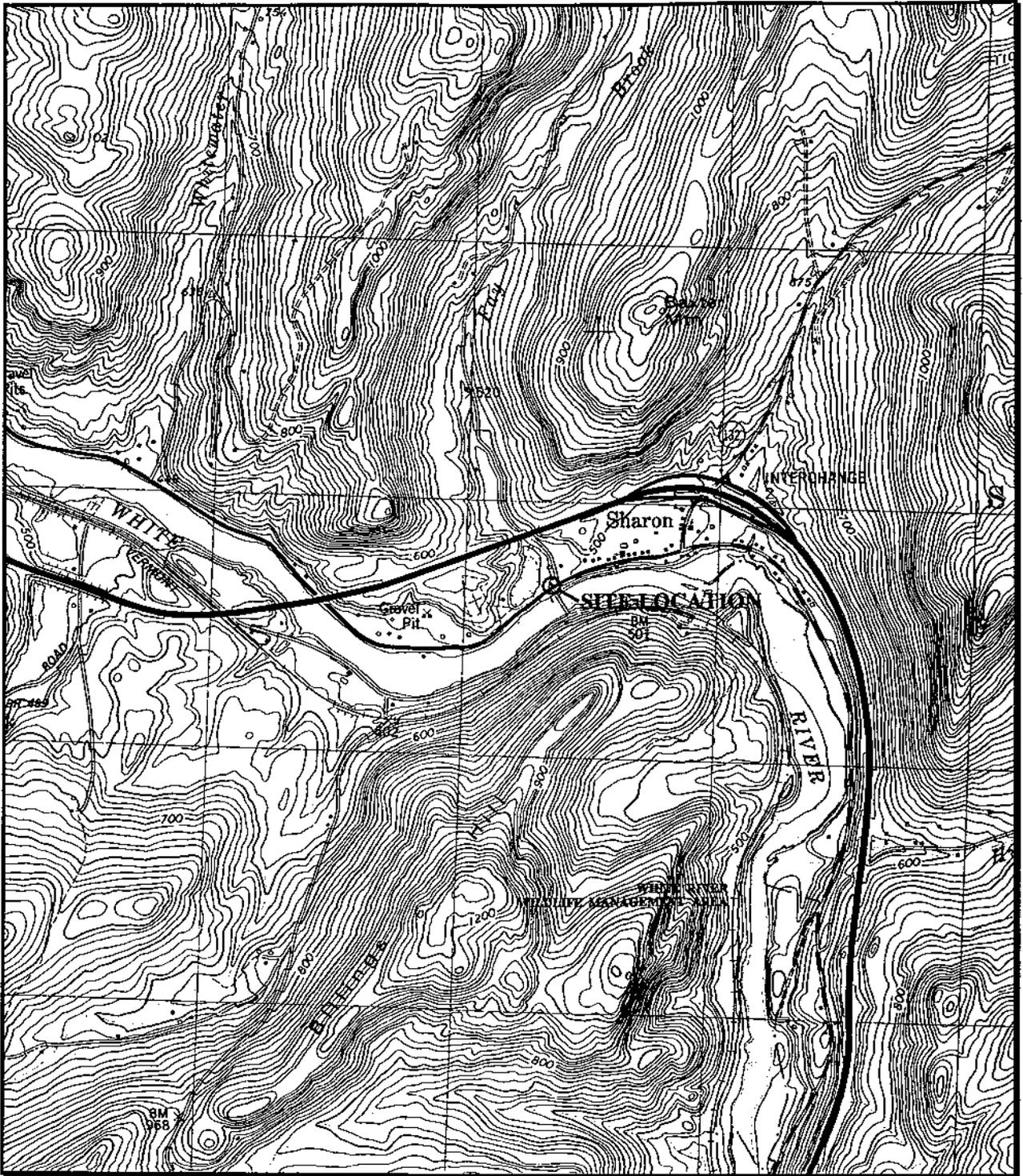
Griffin International, June 1, 1992, Gasoline UST Closure Report.

Griffin International, December 4, 1996, Diesel Piping Replacement Inspection Report.

Griffin International, April 16, 1997, Gasoline Piping Replacement Inspection Report.

APPENDIX A

**Site Location Map
Site Sketch**



4-10-10-10

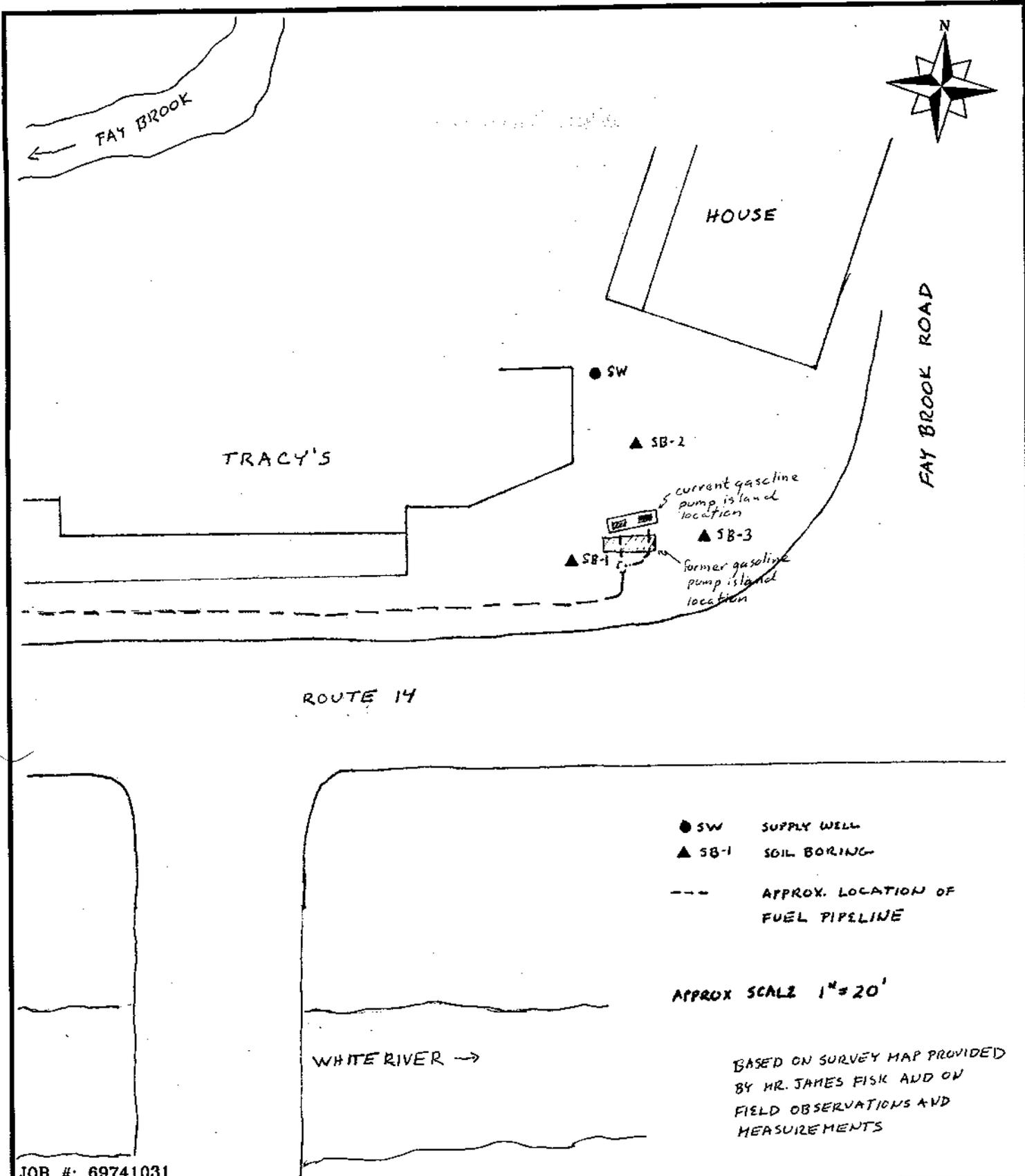
SITE LOCATION MAP

Tracy's Midway Station, Sharon, VT

Base Map: USGS Sharon, VT 7.5 minute quadrangle,
dated 1981 and photoinspected 1983

Scale: 1:24,000





- SW SUPPLY WELL
- ▲ SB-1 SOIL BORING
- APPROX. LOCATION OF FUEL PIPELINE

APPROX SCALE 1" = 20'

BASED ON SURVEY MAP PROVIDED BY MR. JAMES FISK AND ON FIELD OBSERVATIONS AND MEASUREMENTS

JOB #: 69741031



TRACY'S MIDWAY STATION

SHARON, VERMONT

SITE SKETCH

DATE: 8/13/97	DWG.#:1	SCALE: 1"=20'	DRN.:SB	APP.:CW
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APPENDIX B

Soil Boring Logs

PROJECT TRACY'S MIDWAY STATION

LOCATION SHARON, VERMONT

DATE DRILLED 7/14/97 TOTAL DEPTH OF HOLE 47.0'

DIAMETER 4.25"

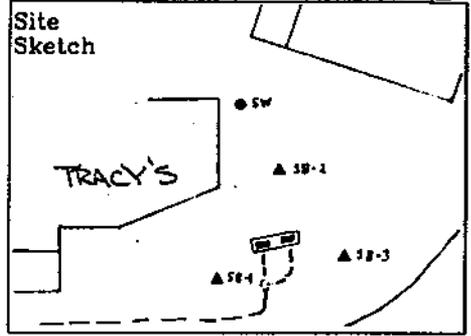
SCREEN DIA. NA LENGTH NA SLOT SIZE NA

CASING DIA. NA LENGTH NA TYPE NA

DRILLING CO. T&K DRILLING METHOD HSA

DRILLER ALAN TOMMILA LOG BY C. WARD

WELL NUMBER SB1



GRIFFIN INTERNATIONAL, INC

DEPTH IN FEET	WELL CONSTRUCTION	NOTES	BLOWS PER 6" OF SPOON & PID READINGS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)	DEPTH IN FEET	
0					0	
2			0'-4'	Brown, fine SAND and SILT, trace gravel, loose, dry.	2	
4				0 ppm		4
6				5'-7'-1/1/5/11	Brown, fine SAND and SILT, trace gravel, loose, dry.	6
8				0 ppm	Cobbles at 8.0'.	8
10				10'-12'-19/25/19/24	Dense, whitish fine SAND, then gray/brown GRAVEL and SAND, some silt, loose, dry.	10
12				0 ppm		12
14						14
16				15'-17'-3/8/12/20	Gray/brown, fine to medium SAND, some silt, trace gravel, loose, damp.	16
18				0 ppm		18
20				20'-22'-7/25/28/31	Gray/brown, medium to coarse SAND, and GRAVEL, little silt, loose, damp.	20
22			NATIVE BACKFILL	0 ppm		22
24						24
26				25'-27'-16/25/24/26	Gray/brown GRAVEL and medium/coarse SAND, little silt, loose, damp.	26
28			0 ppm		28	
30			30'-32'-22/22/21/26	Gray/brown, medium/coarse SAND, little gravel, trace silt, loose, damp.	30	
32			0 ppm		32	
34					34	
36			35'-37'-19/26/52/80	Gray/brown GRAVEL and medium/coarse SAND, trace silt, loose, damp.	36	
38			0 ppm		38	
40			40'-42'-36/37/24/29	Gray/brown GRAVEL and SAND, some silt, loose, damp.	40	
42			0 ppm		42	
44					44	
46			45'-47'-19/27/21/25	45.0' WATER TABLE	46	
48		UNDISTURBED NATIVE SOIL	0 ppm	Gray/brown GRAVEL and SAND, some silt, wet.	48	
50				END OF EXPLORATION AT 47'	50	

PROJECT TRACY'S MIDWAY STATION

LOCATION SHARON, VERMONT

DATE DRILLED 7/14/97 TOTAL DEPTH OF HOLE 16.0'

DIAMETER 4.25"

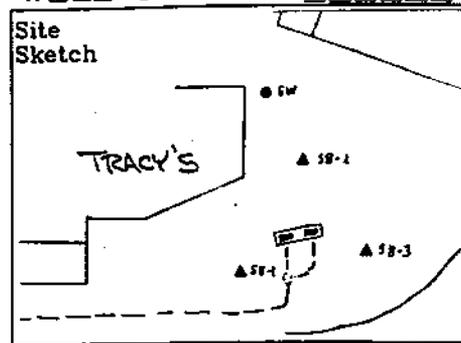
SCREEN DIA. NA LENGTH NA SLOT SIZE NA

CASING DIA. NA LENGTH NA TYPE NA

DRILLING CO. T&K DRILLING METHOD HSA

DRILLER ALAN TOMMILA LOG BY C. WARD

WELL NUMBER SB2



GRIFFIN INTERNATIONAL, INC

DEPTH IN FEET	WELL CONSTRUCTION	NOTES	BLOWS PER 6" OF SPOON & PID READINGS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)	DEPTH IN FEET		
0					0		
1	[Hatched Area]	NATIVE BACKFILL	0'-2'-8/5/3/2 0.4 ppm	Brown SAND, some silt, little gravel, loose, dry.	1		
2						2	
3					2'-4'-5/7/8/8 0 ppm	Brown, fine SAND and SILT, trace gravel, loose, dry.	3
4							4
5					4'-6'-5/4/5/4 0 ppm	Brown, medium/fine SAND and SILT, trace gravel, loose, damp.	5
6							6
7					6'-8'-7/16/12/10 0 ppm	Brown, fine SAND and SILT, damp, then 2" layer of PHYLITE with pyrite, then brown, medium/coarse SAND, some silt, little gravel.	7
8							8
9					8'-10'-18/15/12/20 0 ppm	Gray/brown SAND, some silt, little gravel, damp, then gray rock fragments.	9
10							10
11					10'-12'-74/23/13/11 0 ppm	Gray/brown SAND and GRAVEL, little silt, damp.	11
12							12
13					12'-14'-18/15/11/17 0 ppm	Light brown, fine SAND and SILT, dense, damp, some very thin layers of dark brown silt.	13
14							14
15					14'-16'-18/18/15/15 0 ppm	Light brown, fine SAND and SILT, dense, damp, some very thin layers of dark brown silt.	15
16	[Screened Area]	UNDISTURBED NATIVE SOIL		END OF EXPLORATION AT 16'	16		
17					17		
18					18		
19					19		
20					20		
21					21		
22					22		
23					23		
24					24		
25					25		

PROJECT TRACY'S MIDWAY STATION

LOCATION SHARON, VERMONT

DATE DRILLED 7/14/97 TOTAL DEPTH OF HOLE 15.0'

DIAMETER 4.25"

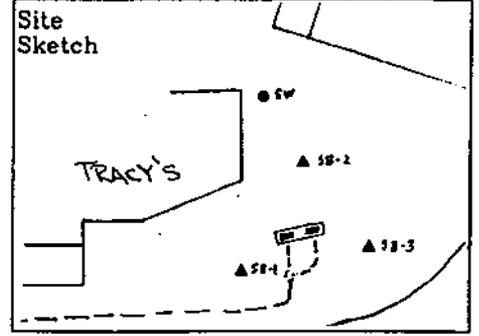
SCREEN DIA. NA LENGTH NA SLOT SIZE NA

CASING DIA. NA LENGTH NA TYPE NA

DRILLING CO. T&K DRILLING METHOD HSA

DRILLER ALAN TOMMILA LOG BY C. WARD

WELL NUMBER SB3

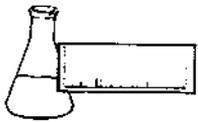


GRIFFIN INTERNATIONAL, INC

DEPTH IN FEET	WELL CONSTRUCTION	NOTES	BLOWS PER 6" OF SPOON & PID READINGS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)	DEPTH IN FEET
0					0
1	[Hatched Area]	NATIVE BACKFILL		Light brown, fine SAND and SILT, loose, dry, some layering.	1
2			1'-3'-7/5/5/5 0 ppm		2
3				Light brown, fine SAND and SILT, loose, dry.	3
4			3'-5'-5/5/6/6 0 ppm		4
5				Brown SAND and GRAVEL, white quartzite, gray phyllite with some orange oxidation, some silt, loose, damp.	5
6			5'-7'-7/14/12/11 0 ppm		6
7				Brown SAND and GRAVEL, white quartzite, gray phyllite with some orange oxidation, some silt, loose, damp.	7
8			7'-9'-15/17/19/13 0 ppm		8
9				Brown SAND and GRAVEL, white quartzite, gray phyllite with some orange oxidation, some silt, loose, damp.	9
10			9'-11'-7/9/13/12 0 ppm		10
11				Brown SAND and GRAVEL, white quartzite, gray phyllite with some orange oxidation, some silt, loose, damp.	11
12			11'-13'-13/31/25/30 0 ppm		12
13				Gray/brown SAND and GRAVEL, some silt, loose, damp.	13
14			13'-15'-11/16/22/15 0 ppm		14
15	[Hatched Area]	UNDISTURBED NATIVE SOIL		END OF EXPLORATION AT 15'	15
16					16
17					17
18					18
19					19
20					20
21					21
22					22
23					23
24					24
25					25

APPENDIX C

Soil Analyses



ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

REPORT OF LABORATORY ANALYSIS

CLIENT: Griffin International
PROJECT NAME: Tracy's Midway Station
DATE REPORTED: July 29, 1997
DATE SAMPLED: July 14, 1997

PROJECT CODE: GITM1369
REF. #: 106,690 - 106,692

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody record.

Chain of custody indicated proper sample preservation.

All samples were prepared and analyzed by requirements outlined in the referenced methods and within the specified holding times.

All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced methods.

Blank contamination was not observed at levels affecting the analytical results.

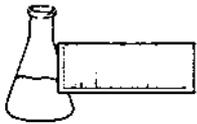
Analytical method precision and accuracy were monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits.

Individual sample performance was monitored by the addition of surrogate analytes to each sample. All surrogate data was determined to be within Laboratory QA/QC guidelines unless otherwise noted.

Reviewed by,

Harry B. Locker, Ph.D.
Laboratory Director

enclosures



ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

EPA METHOD 8020 COMPOUNDS BY EPA METHOD 8260

CLIENT: Griffin International
PROJECT NAME: Tracy's Midway Station
REPORT DATE: July 29, 1997
SAMPLER: Chris Ward
DATE SAMPLED: July 14, 1997
DATE RECEIVED: July 15, 1997

PROJECT CODE: GITM1369
ANALYSIS DATE: July 25, 1997
STATION: SB-1
REF.#: 106,690
TIME SAMPLED: 11:30

<u>Parameter</u>	<u>Detection Limit (ug/kg)</u>	<u>Concentration As Received (ug/kg)</u>
Benzene	10	ND ¹
Chlorobenzene	10	ND
1,2-Dichlorobenzene	10	ND
1,3-Dichlorobenzene	10	ND
1,4-Dichlorobenzene	10	ND
Ethylbenzene	10	ND
Toluene	10	ND
Xylene	20	ND
MTBE	20	ND

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

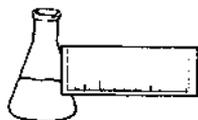
ANALYTICAL SURROGATE RECOVERY:

Dibromofluoromethane: 78.%
Toluene-d8: 101.%
4-Bromofluorobenzene: 88.%

PERCENT SOLIDS: 87.%

NOTES:

1 None detected



ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

EPA METHOD 8020 COMPOUNDS BY EPA METHOD 8260

CLIENT: Griffin International
PROJECT NAME: Tracy's Midway Station
REPORT DATE: July 29, 1997
SAMPLER: Chris Ward
DATE SAMPLED: July 14, 1997
DATE RECEIVED: July 15, 1997

PROJECT CODE: GITM1369
ANALYSIS DATE: July 25, 1997
STATION: SB-2
REF.#: 106,691
TIME SAMPLED: 1:55

<u>Parameter</u>	<u>Detection Limit (ug/kg)</u>	<u>Concentration As Received (ug/kg)</u>
Benzene	10	ND ¹
Chlorobenzene	10	ND
1,2-Dichlorobenzene	10	ND
1,3-Dichlorobenzene	10	ND
1,4-Dichlorobenzene	10	ND
Ethylbenzene	10	ND
Toluene	10	ND
Xylene	20	ND
MTBE	20	ND

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

ANALYTICAL SURROGATE RECOVERY:

Dibromofluoromethane: 85.%
Toluene-d8: 101.%
4-Bromofluorobenzene: 83.%

PERCENT SOLIDS: 91.%

NOTES:

1 None detected



ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

EPA METHOD 8020 COMPOUNDS BY EPA METHOD 8260

CLIENT: Griffin International
PROJECT NAME: Tracy's Midway Station
REPORT DATE: July 29, 1997
SAMPLER: Chris Ward
DATE SAMPLED: July 14, 1997
DATE RECEIVED: July 15, 1997

PROJECT CODE: GITM1369
ANALYSIS DATE: July 25, 1997
STATION: SB-3
REF.#: 106,692
TIME SAMPLED: 3:08

<u>Parameter</u>	<u>Detection Limit (ug/kg)</u>	<u>Concentration As Received (ug/kg)</u>
Benzene	10	ND ¹
Chlorobenzene	10	ND
1,2-Dichlorobenzene	10	ND
1,3-Dichlorobenzene	10	ND
1,4-Dichlorobenzene	10	ND
Ethylbenzene	10	ND
Toluene	10	ND
Xylene	20	ND
MTBE	20	ND

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

ANALYTICAL SURROGATE RECOVERY:

Dibromofluoromethane: 66.%
Toluene-d8: 102.%
4-Bromofluorobenzene: 87.%

PERCENT SOLIDS: 96.%

NOTES:

1 None detected

CHAIN-OF-CUSTODY RECORD

GI# 69741031

22306

Project Name: <i>Tracy's driveway station</i>	Reporting Address: <i>Griffin</i>	Billing Address: <i>Griffin</i>
Site Location: <i>Griffin</i>		
Endyne Project Number: <i>GI TM 1369</i>	Company: <i>Griffin</i>	Sampler Name: <i>Griffin</i>
	Contact Name/Phone #:	Phone #: <i>(802) 567-4238</i>

Lab #	Sample Location	Matrix	G R A B	C O M P	Date/Time	Sample Containers		Field Results/Remarks	Analysis Required	Sample Preservation	Rush
						No.	Type/Size				
<i>106,690</i>	<i>SB-1</i>	<i>SOIL</i>	<i>✓</i>		<i>7/14/97 11:30</i>	<i>1</i>	<i>2.0L</i>		<i>27</i>	<i>Cool</i>	
<i>106,691</i>	<i>SB-2</i>	<i>↓</i>	<i>↓</i>		<i>11:55</i>	<i>1</i>	<i>↓</i>		<i>27</i>	<i>↓</i>	
<i>106,692</i>	<i>SB-3</i>	<i>↓</i>	<i>↓</i>		<i>3:08</i>	<i>1</i>	<i>↓</i>		<i>27</i>	<i>↓</i>	

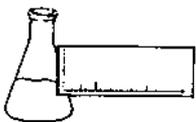
Relinquished by: Signature <i>Christie A. Ward</i>	Received by: Signature <i>M. Miller</i>	Date/Time
Relinquished by: Signature <i>M. Miller</i>	Received by: Signature <i>Teresa M. Chamberlain</i>	Date/Time <i>7-15-97 10:55</i>

 New York State Project: Yes No
Requested Analyses

1	pH	6	TKN	11	Total Solids	16	Metals (Specify)	21	EPA 624	26	EPA 8270 B/N or Acid
2	Chloride	7	Total P	12	TSS	17	Coliform (Specify)	22	EPA 625 B/N or A	<u>27</u>	<u>EPA 8010/8020</u>
3	Ammonia N	8	Total Diss. P	13	TDS	18	COD	23	EPA 418.1	28	EPA 8080 Pest/PCB
4	Nitrite N	9	BOD ₅	14	Turbidity	19	BTEX	24	EPA 608 Pest/PCB		
5	Nitrate N	10	Alkalinity	15	Conductivity	20	EPA 601/602	25	EPA 8240		
29	TCLP (Specify: volatiles, semi-volatiles, metals, pesticides, herbicides)										
30	Other (Specify):										

APPENDIX D

Water Quality Data



ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

REPORT OF LABORATORY ANALYSIS

CLIENT: Griffin International
PROJECT NAME: Tracy's Midway Station
REPORT DATE: July 23, 1997
DATE SAMPLED: July 16, 1997

PROJECT CODE: GITM1409
REF.#: 106,783 - 106,784

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. Chain of custody indicated sample preservation with HCl.

All samples were prepared and analyzed by requirements outlined in the referenced method and within the specified holding times. All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced method. Blank contamination was not observed at levels affecting the analytical results.

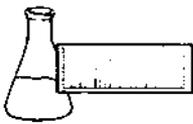
Analytical method precision and accuracy was monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits.

Individual sample performance was monitored by the addition of surrogate analytes to each sample. All surrogate recovery data was determined to be within laboratory QA/QC guidelines unless otherwise noted.

Reviewed by,

Harry B. Locker, Ph.D.
Laboratory Director

enclosures



ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

EPA METHOD 602--PURGEABLE AROMATICS

CLIENT: Griffin International
PROJECT NAME: Tracy's Midway Station
CLIENT PROJ. #: 69741031

DATE RECEIVED: July 17, 1997
REPORT DATE: July 23, 1997
PROJECT CODE: GITM1409

Ref. #:	106,783	106,784			
Site:	Supply Well	Trip Blank			
Date Sampled:	7/16/97	7/16/97			
Time Sampled:	8:00	5:35			
Sampler:	C. Ward	C. Ward			
Date Analyzed:	7/21/97	7/21/97			
UIP Count:	>10	0			
Dil. Factor (%):	100	100			
Surr % Rec. (%):	91	87			
Parameter	Conc. (ug/L)	Conc. (ug/L)			
Benzene	<1	<1			
Chlorobenzene	<1	<1			
1,2-Dichlorobenzene	<1	<1			
1,3-Dichlorobenzene	<1	<1			
1,4-Dichlorobenzene	<1	<1			
Ethylbenzene	<1	<1			
Toluene	1.2	<1			
Xylenes	TBQ <1	<1			
MTBE	<10	<10			

Note: UIP = Unidentified Peaks TBQ = Trace Below Quantitation NI = Not Indicated

